FOOD SAFETY

WHAT IS THE PUBLIC HEALTH ISSUE?

- Foodborne diseases cause about 76 million illnesses, 325,000 hospitalizations, and 5,000 deaths in the United States each year.
- Hospitalization costs for these illnesses are estimated at more than $3 billion per year. Costs from lost productivity are estimated at $8 billion per year.
- Known pathogens account for an estimated 14 million illnesses, 60,000 hospitalizations, and 1,800 deaths. *Salmonella, Listeria,* and *Toxoplasma* are responsible for 75% of these deaths each year.
- Undetermined agents account for the 62 million illnesses, 265,000 hospitalizations, and 3,200 deaths annually.

WHAT HAS CDC ACCOMPLISHED?

CDC monitors occurrences of foodborne disease illnesses in the United States. These surveillance systems provide early warning of dangers in the food supply, provide data on new or changing patterns of foodborne diseases, track progress of current prevention efforts, and provide information for development of new prevention strategies. CDC works with state and local health departments to build their epidemiology, laboratory, and environmental health capacities for foodborne disease surveillance and outbreak response. CDC also works with federal food safety regulatory agencies to identify and evaluate foodborne disease prevention strategies.

Example of Program in Action

FoodNet is a network of 10 sites around the United States that monitors more that 36 million persons (13% of the U.S. population). This network monitors the major causes of foodborne illness, conducts surveys for unreported foodborne illness, and studies risk factors associated with illness. FoodNet data provide the most comprehensive information available for foodborne illness. FoodNet data for 1996 through 2002 indicate substantial declines in the incidence of *Campylobacter, Listeria, Typhimurium, and Yersinia. Campylobacter,* and Listeria incidences are approaching their respective national health objectives, indicating important progress in food safety. PulseNet, winner of the Innovations in Government award, performs molecular fingerprinting of bacterial foodborne pathogens. This network facilitates the prompt recognition of large and small foodborne outbreaks so interventions can be implemented promptly and disease can be prevented. PulseNet participants include all 50 state public health laboratories, 4 local public health laboratories, 7 Food and Drug Administration laboratories and the U.S. Department of Agriculture FSIS laboratory. In 2003, PulseNet detected several large multi-state outbreaks in less than 14 days.

WHAT ARE THE NEXT STEPS?

CDC will continue to

- Detect, investigate, and monitor emerging foodborne pathogens, the diseases they cause, and the factors influencing their emergence.
- Assist state and local health departments in response to unique and multi-state foodborne disease outbreaks.
- Build state and local health department capacity to detect and respond to foodborne disease outbreaks through technology transfer, guidance, training, and providing funds to enhance infrastructure.
- Advance laboratory diagnostics and expand laboratory networks for foodborne bacteria, viruses, parasites, and other contaminants.
- Improve integration of laboratory science and epidemiology resources to optimize public health practices for the prevention and control of food-related illnesses.
- Disseminate public health information about foodborne illnesses to physicians and the public.